



Fig.3A.

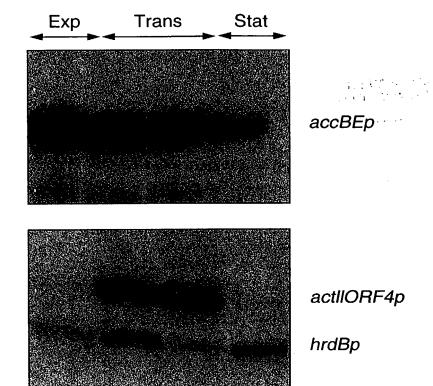
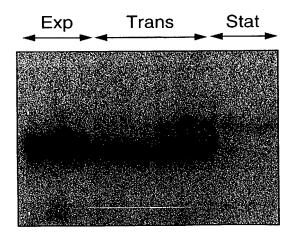


Fig.3C.



Probe FLP

Fig.3B

TTTGCCCGGCCTCTGACATGCCTCAGCTGCCGAGCGTTAGGAACGAGCCGAAGCATCTCA AAACGGGCCGGAGACTGTACGGAGTCGACGGCTCGCAATCCTTGCTCGGCTTCGTAGAGT accBEp

 α Ö ഷ ď Д Е Д 团 ᠐ Д ø 団 Д П > H Σ [AccB]



Fig.4A.

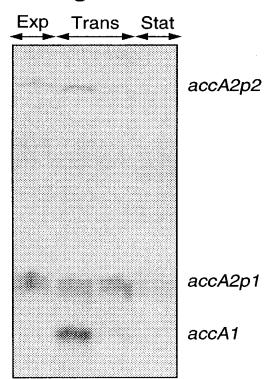
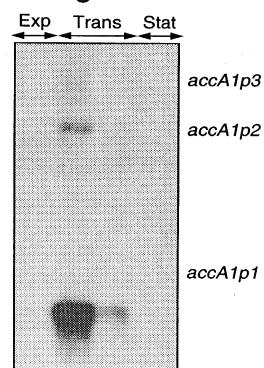


Fig.4B.





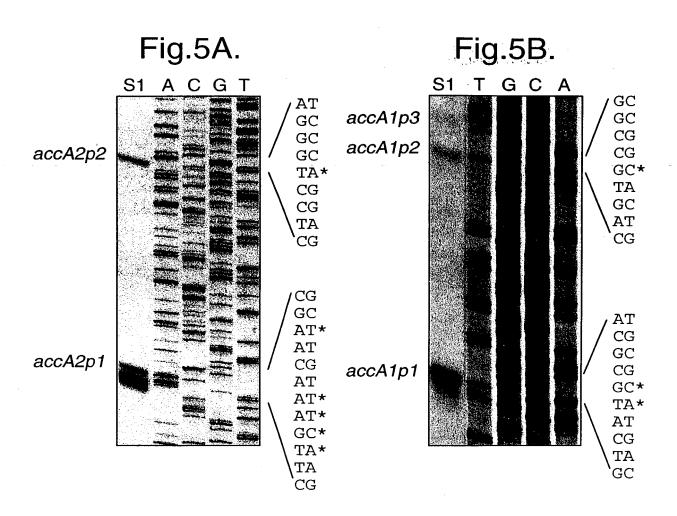


Fig.5C.

accA1p3

CAGCCATGTCTCACGAGCCGGTAACCCCGGGGCAACCGCGAÁCCGGACGGCCCCTTCCGG CCACAAAGAAACCGCGTGGCCCGCAGCACGCCCTTACAGAGACCTTGACCACACAGGGGG accA2 accA1

CACTGGTCCTGCTCCGCCCGGGGGGGGGGTGATTACCGCGGGATGGACGGGCGGCTGAAT GCTAGGGTTTCCCCCAGGAGTCCTGCGTACCGCGGTACTACAAGGGCTTTCGGGGGTCGA -10 accA2p2 accA1p2 accA1 accA2

accA1p1 -10 ACCGCCGATACGTTCTGCGATGACTGTTCCGAACAGGGCGGCGTGAATTCCAACCGTT GCGAGCCTCGAATCACGCTCCGTGTGGGCAAGCTCACCATTGGGGACGGGTCGAAGTGCC accA1 accA2

GTGTCGGCAGTCCC<u>TAAACT</u>CGGCTTGTTTCAAG**GAGGGA**GCCTCAATC**GTG**CGCAAGGT GGCCGTCGGCGAGCCCCGATCAGTAATCGAGTGAGTGAGGAGAATCTTCGTGCGCAAGGT Œ -10 accA2p1 accA2 accA1

SCHEETE.

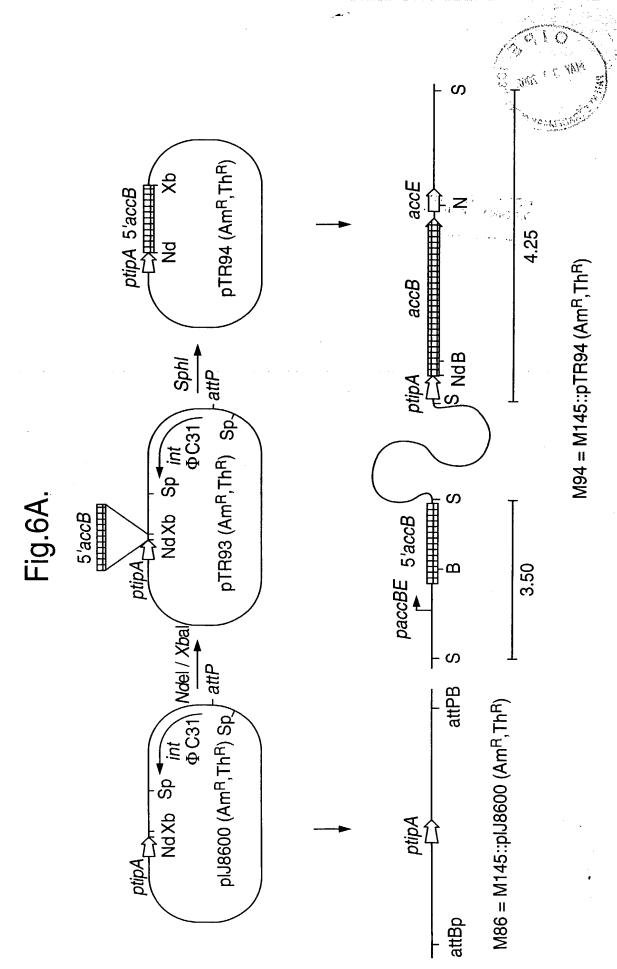




Fig.6B.

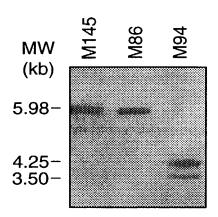


Fig.7A.

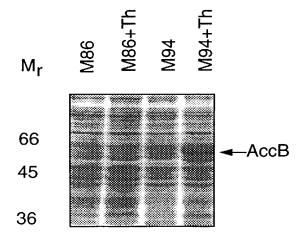
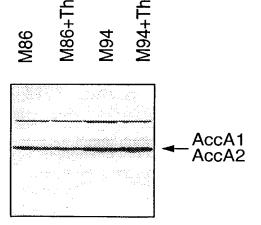
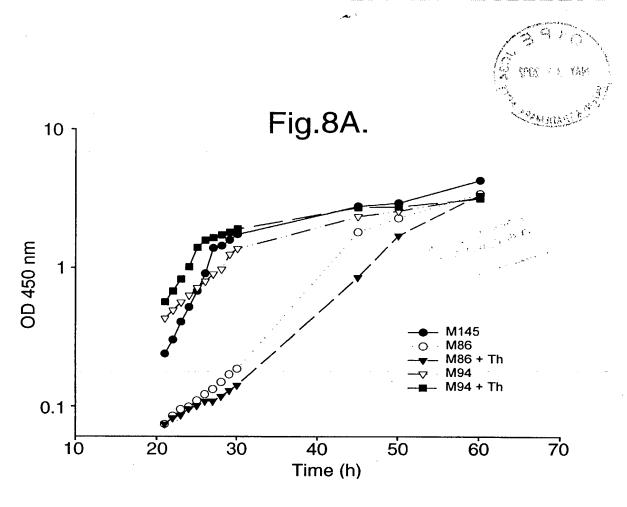
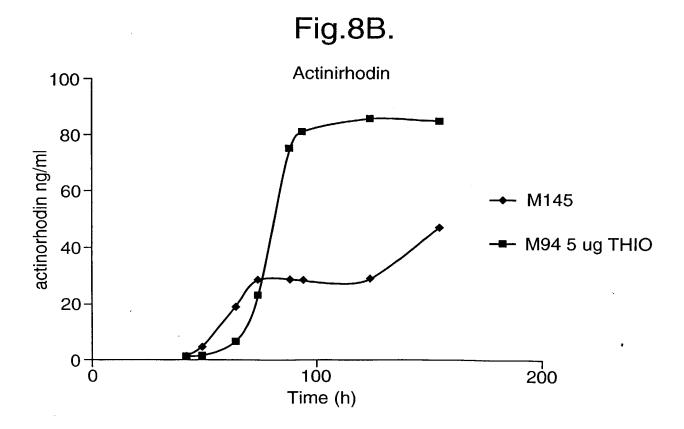


Fig.7B.









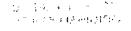


Fig.9.

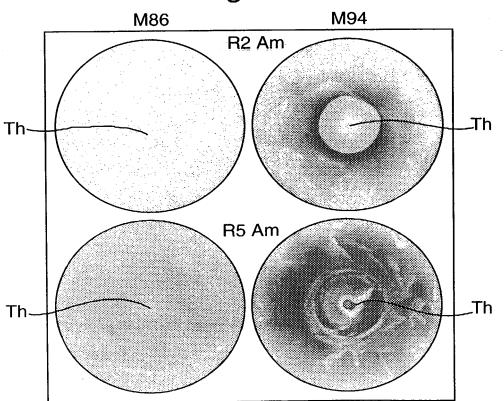




Fig. 10

Fig. 11

A. AccA1

VRKVLIANRGEIAVRVARACRDAGIASVAVYADPDRDALHVRAADEAFALGGDTPATSYLDIAKVL KAARESGADAIHPGYGFLSENAEFAQAVLDAGLIWIGPPHAIRDRGEKVAARHIAQRAGAPLVAG TPDPVSGADEVVAFAKEHGLPIAIKAAFGGGGRGLKVARTLEEVPELYDSAVREAVAAFGRGECFV ERYLDKPRHVETQCLADTHGNVVVVSTRDCSLQRRHQKLVEEAPAPFLSEAQTEQLYSSSKAILKE AGYGGAGTVEFLVGMDGTIFFLEVNTRLQVEHPVTEEVAGIDLVREMFRIADGEELGYDDPALRGH SFEFRINGEDPGRGFLPAPGTVTLFDAPTGPGVRLDAGVESGSVIGPAWDSLLAKLIVTGRTRAEA LQRAARALDEFTVEGMATAIPFHRTVVRDPAFAPELTGSTDPFTVHTRWIETEFVNEIKPFTTPAD TETDEESGRETVVVEVGGKRLEVSLPSSLGMSLARTGLAAGARPKRRAAKKSGPAASGDTLASPMQ GTIVKIAVEEGQEVQEGDLIVVLEAMKMEQPLNAHRSGTIKGLTAEVGASLTSGAAICEIKD

A. AccA2

VRKVLIANRGEIAVRVARACRDAGIASVAVYADPDRDALHVRAADEAFALGGDTPATSYLDIAKVL KAARESGADAIHPGYGFLSENADFAQAVLDAGLIWIGPPPHAIRDRGEKVAARHIAQRAGAPLVAG TPDPVSGADEVVAFAKEHGLPIAIKAAFGGGGRGLKVARTLEEVPELYDSAVREAVAAFGRGECFV ERYLDKPRHVETQCLADTHGNVVVVSTRDCSLQRRHQKLVEEAPAPFLSEAQTEQLYSSSKAILKE AGYVGAGTVEFLVGMDGTISFLEVNTRLQVEHPVTEEVAGIDLVREMFRIADGEELGYDDPALRGH SFEFRINGDHPGRGFLPAPGTVTLFDAPTGPGVRLDAGVESGSVIGPAWDSLLAKLIVTGRTRAEA LQRAARALDEFTVEGMATAIPFHRTVVRDPAFAPELTGSTDPFTVHTRWIETEFVNEIKFFTTPAD TETDEESGRETVVVEVGGKRLEVSLPSSLGMSLARTGLAAGARPKRRAAKKSGPAASGDTLASPMQ GTIVKIAVEEGQEVQEGDLIVVLEAMKMEQPLNAHRSGTIKGLTAEVGASLTSGAAICEIKD



Fig. 11 (cont)

B. accAl

gtgcgcaaggtgctcatcgccaatcgtggcgaaatcgctgtccgcgtggcccgggcctgccqqqac gccgggatcgcgagcgtggccgtctacgcggatccgggaccgggacgcgttgcacgtccgtgccqct gatgaggcgttcgccctgggtggtgacacccccgcgaccagctatctggacatcgccaaggtcctc aaagccgcgcgagtcgggcgcggacgccatccaccccggctacggattcctctcggagaacqcc gaccgtggcgaaaaggtcgccgcccgccacatcgcccagcgggccggcgccccctggtcqccqqc acccccgaccccgtctccggcgcggacgaggtcgtcgccttcgccaaggagcacggcctgcccatc gccatcaaggccgccttcggcggcgggcgcgcgcctcaaggtcgcccgcaccctcgaagaggtg ccggagctgtacgactccgccgtccgcgaggccgtggccgccttcggccgcgqgqaqtqcttcqtc gagegetacetegacaageeeegeeacgtggagaeeeagtgeetqqeeqaeaceeacqqeaacqtq gtcgtcgtctccacccgcgactgctccctccagcgccgccaccaaaagctcgtcgaggaggccccc gcgccctttctctccgaggcccagacggagcagctgtactcatcctccaaggccatcctgaaggag gccggctacggcgccggcaccgtggagttcctcgtcggcatggacggcacgatcttcttcctg gaggtcaacacccgcctccaggtcgagcacccggtcaccgaggaagtcgccggcatcgacttqqtc cgcgagatgttccgcatcgccgacggcgaggaactcggttacgacgaccccqccctqcqcqqccac teettegagtteegeateaacggegaggaceeeggeegeggetteetgeeegeeeeeggeaeegte accetettegaegegeeeaceggeeeeggegteeggeetggaegeeggegtegagteeggeteeg teateggeeeegeetgggaeteeeteetegeeaaactgategteaeeggeegeaeeegegeegagg cactccagegegegegecetggaegagtteacegtegagggeatggeeacegeeateceet tccaccgcacggtcgtccgcgacccggccttcgccccgaactcaccggctccacggaccccttca ccgtccacacccggtggatcgagacggagttcgtcaacgagatcaagcccttcaccacgcccqccq acaccgagacggacgaggtcgggccgggagacggtcgtcgtcgaqgtcggcgqcaaqcqcctqq aagtctccctcccctccagcctgggcatgtccctggcccgcaccggcctggccgccggcccgcc ccaagegcegcggccaagaagtccggcccgcctcgggcgacaccctcgcctccccqatqc agggcacgatcgtcaagatcgccgtcgaggaaggccaggaagtccaggaaggcgacctcatcgtcg tactcgaggcgatgaagatggaacagccctcaacgcccacaggtccggcaccatcaagggcctca ccgccgaggtcgcgcctccctcacctccggcgccgccatctgcgagatcaaggactga



Fig. 11 (cont)

B. accA2

gtgcgcaaggtgctcatcgccaatcgtggcgaaatcgctgtccgcgtggcccgggcctgccgggac gccgggatcgcgagcgtggccgtctacgcggatccggaccgggacgcgttgcacgtccgtgccgct gatgaggcgttcgccctgggtggtgacacccccgcgaccagctatctggacatcgccaaggtcctc aaagccgcgcgagtcgggcgcggacgccatccaccccggctacggattcctctctggagaacgcc gaccgtggcgaaaaggtcgccgccacatcgcccagcgggccggcgcccccctggtcgccgc acccccgaccccgtctccggcgcggacgaggtcgtcgccttcgccaaggagcacggcctqccatc gccatcaaggccgccttcggcggcggggggggcgctcaaggtcgcccqcaccctcqaaqaqqtq ccggagctgtacgactccgccgtccgcgaggccgtggccgccttcggccgcgggggagtgcttcgtc gagcgctacctcgacaagccccgccacgtggagacccagtgcctggccgacaccccacggcaacgtg gtcgtcgtctccacccgcgactgctccctccagcgccgccaccaaaagctcgtcqaqqaqqcccc gcgccctttctctccgaggcccagacggagcagctgtactcatcctccaaggccatcctgaaggag gccggctacggcgccggcaccgtggagttcctcgtcggcatggacggcacgatcttcttcctg gaggtcaacacccgcctccaggtcgagcacccggtcaccgaggaagtcgccggcatcgacttggtc cgcgagatgttccgcatcgccgacggcgaggaactcggttacgacgaccccgccctgcgcqqccac accetettegaegegeeeaceggeeeeggegteegcetggaegeeggegtegagteeggeteegte ateggeccegectgggactecetectegecaaactgategteaceggecgcaceeggeggggaa $\verb|ctccagcgcgccccgcgccctggacgagttcaccgtcgagggcatggccaccgccatccccttc|$ caccgcacggtcgtccgcgacccggccttcgcccccgaactcaccggctccacggaccccttcacc accgagacggacgaggagtcgggccgggagacggtcgtcgtcgaggtcggcggccaagcgcctggaa gtctccctcccagcctgggcatgtccctggcccgcaccggcctggccgccggggccgcccc aagcgccgcgcgccaaqaagtccggccccgccgcctcgggcgacaccctcgcctccccgatgcag ggcacgatcgtcaagatcgccgtcgaggaaggccaggaagtccaggaaggcgacctcatcgtcgta ctcgaggcgatgaagatggaacagccctcaacgcccacaggtccggcaccatcaagggcctcacc gccgaggtcggcgcctccctcacctccggcgccgccatctgcgagatcaaggactga



Fig. 12

A. AccB

MTVLDEAPGEPTDARGRVAELHGIRAAALAGPSEKATAAQHAKGKLTARERIELLLDPGSFREVEQ LRRHRATGFGLEAKKPYTDGVITGWGTVEGRTVFVYAHDFRIFGGALGEAHATKIHKIMDMAIAAG APLVSLNDGAGARIQEGVSALAGYGGIFQRNTKASGVIPQISVMLGPCAGGAAYSPALTDFVFMVR DTSQMFITGPDVVKAVTGEEITQNGLGGADVHAETSGVCHFAYDDEETCLAEVRYLLSLLPQNNRE NPPRAESSDPVDRRSDTLLDLVPADGNRPYDMTKVIEELVDEGEYLEVHERWARNIICALARLDGR VVGIVANQPQALAGVLDIEASEKAARFVQMCDAFNIPIITLLDVPGFLPGVDQEHGGIIRHGAKLLYAYCNATVPRISLILRKAYGGAYIVMDSQSIGADLTYAWPTNEIAVMGAEGAANVIFRRQIADAED PEAMRARMVKEYKSELMHPYYAAERGLVDDVIDPAETREVLITSLAMLHTKHADLPSRKHGNPPQ

B. accB

AAGCTGACGGCACGTGAGCGCATCGAGCTGCTCCTGGACCCCGGCTCCTTCCGCGAGGTCGAGCAG CTGCGCCGGCACCGGGCTTCGGCCTGGAGGCCAAGAAGCCGTACACCGACGGTGTCATC ACCGGCTGGGGCACGGTCGAGGGCCGCACGGTCTTCGTCTACGCCCACGACTTCCGGATCTTCGGC GGCGCGCTGGGCGAGGCCCACGCCACGAAGATCCACAAGATCATGGACATGGCCATCGCGGCCGGT GCCCGCTGGTGTCGCTGAACGACGCCCCGCGCCCCGTATCCAGGAGGCCGTCAGCGCGCTCGCC GGGTACGGCGCATCTTCCAGCGCAACACCAAGGCGTCCGGCGTCATCCCGCAGATCAGCGTGATG CTCGGCCCTGCGCGGGCGCGCCTACAGCCCCGCCTCACCGACTTCGTCTTCATGGTCCGC GACACCTCGCAGATGTTCATCACGGGCCCGGACGTCGTCAAGGCGGTCACCGGCGAGGAGATCACG CAGAACGGTCTGGGCGGCCGACGTGCACGCCGAGACGTCCGGCGTGTGCCACTTCGCCTACGAC GACGAGGAGACCTGCCTCGCCGAGGTCCGCTACCTCCTCCTCCCCCCAGAACAACCGGGAG AACCCGCCCGCGCGAGTCCTCCGACCCCGTGGACCGCCGCTCGGACACCCTCCTCGACCTGGTC CCGGCGGACGCCAACCGCCGTACGACATGACCAAGGTCATCGAGGAACTCGTCGACGAGGGCGAG TACCTGGAGGTCCACGAGCGTTGGGCCCGCAACATCATCTGCGCGCTTGGCCCGTCTCGACGGGCGG GTCGTGGGCATCGTCGCCAACCAGCCGCAGGCCCTGGCCGGTGTCCTGGACATCGAGGCGTCGGAG AAGGCGGCCCGCTTCGTCCAGATGTGCGACGCCTTCAACATCCCGATCATCACTCTTCTGGACGTA TACGCGTACTGCAACGCGACCGTGCCCCGGATCTCGCTGATCCTGCGCAAGGCGTACGGAGGTGCT TACATCGTCATGGACAGCCAGTCCATCGGCGCCGACCTCACCTACGCCTGGCCGACCAACGAGATC GCCGTCATGGGCGCGGAAGGTGCCGCGAACGTCATCTTCCGCCGGCAGATCGCCGACGCCGAGGAC CCCGAGGCCATGCGGCGCATGGTCAAGGAGTACAAGTCCGAGCTGATGCACCCCTACTACGCG GCCGAACGCGGTCTGGTCGACGACGTCATCGACCCCGCCGAAACCCGCGAGGTGCTGATCACGTCC CTGGCGATGCTCCACACCAAGCACGCCGACCTGCCCTCCCGCAAGCACGGCAACCCGCCGCAGTGA

17. 1986年代7月日 1787年7月1日日日



Fig. 13

A. AccE

MSPADIRVEKGHAEPEEVAAITALLLARAAARPAEIAPTHGGGRARAGWRRLEREPGFRAPHSWR

B. accE

